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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,294	08/22/2001	Stephen E. Silverman	76125.00101	8790

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EXAMINER

VO, HUYEN X

ART UNIT PAPER NUMBER

2655

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,294

Applicant(s)

SILVERMAN ET AL.

Examiner

Huyen X Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8, 12-14, 16, 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1, 9-11, 15, 17-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverman (US 5148483).
3. Regarding claim 1, Silverman (5148483) discloses a method for evaluating near-term suicidal risk by analysis of a series of spoken words, comprising the steps of: converting the spoken series of words into a signal having time varying amplitude indicative of energy content of said words as spoken (*col. 4, lines 18-67*); dynamically monitoring said signal to detect changes in energy content of said words as spoken (*col. 4, lines 18-67*); identifying the person as having a relatively high near-term risk of suicide if detected reduction in energy content of said series of words over the course of speaking of the same exceeds that occurring in the speech of individuals in good mental health having no near-term suicidal risk (*col. 5, lines 1-48 and col. 9, lines 1-13*).
4. Regarding claim 9, Silverman (5148483) discloses a method for evaluating near-term suicidal risk by analysis of series of spoken words by an emotionally agitated and/or depressed person, comprising the steps of: converting spoken series of words

into a signal indicative of the amplitude thereof (*col. 4, lines 18-67*); repeatedly dynamically monitoring said amplitude represented by said signal to detect amplitude increases over the course of several words followed by a return to the amplitude level prior to the detected amplitude increase to define a dynamic amplitude pattern (*col. 5, lines 1-48 and referring to examples 1-8 and/or figure 2*); identifying the person as having a relatively high near-term risk of suicide if dynamic amplitude pattern differs by more than a pre-selected amount from the dynamic amplitude patterns of individuals in good mental health having no near-term suicidal risk (*col. 5, lines 1-48 and col. 9, lines 1-13*).

5. Regarding claims 15 and 17, Silverman (5148483) further discloses the method of claims 1 and 9, respectively, further comprising the steps of: dynamically monitoring said signal to detect presence therein of parameters conventionally indicating anxiety in the speaker (*col. 5, lines 1-48 and referring to examples 1-8*); and identifying the person as having a relatively high near-term risk of suicide in the absence of such parameters from such signal thereby indicating lack of speaker anxiety (*col. 5, lines 1-48 and referring to examples 1-8*).

6. Claims 10-11 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverman (US 5976081).

7. Regarding claim 10, Silverman (5976081) discloses a method for evaluating near-term suicidal risk by analysis of a series of spoken words, comprising the steps of: converting the spoken series of words into a signal indicative of the rhythmic structure thereof (*col. 5, line 15 to col. 6*); dynamically monitoring said signal to detect changes in the rhythm of the speech of said person followed by a return to the determined rhythmic structure (*col. 5, line 15 to col. 6*); identifying the person as having a relatively high near-term risk of suicide if detected changes in speech rhythm of the person repeatedly occur more often than in speech of individuals in good mental health having no near-term suicidal risk (*col. 5, line 15 to col. 6, line 46 and examples 1-11*).

8. Regarding claim 11, Silverman (5976081) discloses a method for evaluating near-term suicidal risk by analysis of a series of spoken words, comprising the steps of: converting the spoken series of words into a signal having time varying amplitude indicative of energy content of said words as spoken (*col. 5, line 15 to col. 6, line 46*); dynamically monitoring said signal to detect changes in energy content of said words as spoken (*col. 5, line 15 to col. 6, line 46*); identifying the person as having a relatively high near-term risk of suicide if the combination of detected intonal increase in energy content and terminal decrease in energy content of said words exceeds that occurring in the speech of individuals in good mental health having no near-term suicidal risk (*col. 5, line 15 to col. 6, line 46 and examples 1-11*).

9. Regarding claim 18, Silverman (5976081) further discloses the method of claim 10 further comprising the steps of: dynamically monitoring said signal to detect presence therein of parameters conventionally indicating anxiety in the speaker (*col. 5, line 15 to col. 6, line 46*); and identifying the person as having a relatively high near-term risk of suicide in the absence of such parameters from such signal thereby indicating lack of speaker anxiety (*col. 5, line 15 to col. 6, line 46*).

Allowable Subject Matter

10. Claims 2-8, 12-14, 16, and 19-20 are allowed over prior art of record.

11. The following is a statement of reasons for the indication of allowable subject matter: Pertrushin (US Patent No. 6151571) discloses a method for detecting emotion in voice signals through analysis of a plurality of voice signal parameters. However, Bogdashevsky et al. (US 6151571) disclose a system that includes a knowledge base containing at least one speech model corresponding to at least one psychological characteristic of a number of reference subjects. A signal processor is used for comparing the at least one speech model with test speech parameters of a test subject. Each speech model is represented by a statistical time-ordered series of frequency representations of the speech of the reference subjects. The speech model is independent of a priori knowledge of style parameters and it accounts for phase information. A speech parameter former is used for generating the test parameters in the test subject's speech. The speech parameter former includes speech acquisition circuitry that is remote from the knowledge base. Both Pertrushin and Bogdashevsky et

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al. fail to specifically disclose a method for detecting frequency of commencement of words, and a method for determining if the initial amplitude of said spoken word exceeds amplitude of said preceding and/or succeeding contiguous words by more than a pre-selected amount, to determine if the person has a relative high near-term risk of suicide. Furthermore, it would have not been obvious to one of ordinary skill in the art at the time of invention to modify Pertrushin and/or Bogdashevsky et al. to obtain the claimed invention. Therefore, claims 2-8, 12-14, 16, and 19-20 are allowed over prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HXV

6/27/2005


SUSAN MCFADDEN
PRIMARY EXAMINER